



If you are new to electrical etching, please read this PDF before ordering. Electrical etching is different than chemical etching, especially with regard to etching small pieces and resist options.

Is Electrical Etching Right for You?

Advantages:

- Does not produce harmful fumes
- Solution can be used indefinitely as copper atoms plate to the bottom of a stainless steel cathode rather than adding copper ions to the solution. Simply strain and re-use.
- Does not produce undercuts as electricity etches in a straight line. Very smooth etch.
- No need for hazardous disposal. If one chooses to dispose of the solution the diluted solution is commonly used to routinely flush away to rid pipes of tap roots for home maintenance.
- No need for user intervention during etching, no agitation required.
- Can etch on copper and bronze metal clay and even beads due to the nature of electrical etching the material is not “eaten” away the chemicals do.
- Copper sulfate (for etching copper, brass, or bronze) can be found in hardware stores.

Disadvantages:

- Small coin sized pieces are not good candidates for etching as there is very little copper for the controller to “read”. It’s also hard to tape an electrode wire to the back of the piece. It’s better to etch larger pieces of metal and then cut shapes afterwards.
- Can only etch one piece at a time.
- The resist needs to be tough, rubberstamp ink and sharpie will not hold up. Use toner, paint pens, Resist paint or UV-30 film instead. Most resists will benefit from heat setting before etching.
- Takes a bit longer than chemical etching.
- Care must be taken for proper set up to make sure electric current and power are not obstructed. Piece must be set close and level to cathode without touching. Electrode must be attached well to the piece to conduct.

For more help, project ideas, and supplies, visit the “Learn” page at www.sherrihaab.com